![EION WIRELESS]

E-LINK Rugged & Ultra Rugged 2 x 2 MIMO 1200 Mbps Dual Band Access Point

OVERVIEW

E-LINK Rugged & Ultra Rugged offers 2 x 2 MIMO latest 802.11ac/a/b/g/n technology with 5dBi antenna to provide excellent coverage and capacity. It is concurrent Dual-band 2.4/5GHz Wi-Fi Access Point that provides Rugged & Ultra Rugged deployment Outdoor Wi-Fi coverage at signaling rates up to 900 Mbps on 5 GHz and 300 Mbps on 2.4 GHz. E-LINK Rugged & Ultra Rugged is designed for small outdoor areas requiring Wi-Fi coverage or a short distance point to point link.

The E-LINK Rugged & Ultra Rugged AC has significantly higher capacity and increased coverage capabilities over conventional Wi-Fi Access Points due to a number factors working in concert. These factors are the latest MU technology.

E-LINK Rugged & Ultra Rugged has on Board Industrial grade PA and LNA which improved the coverage significantly as compared to any standard access point.

Based on CAPWAP protocol, E-Link Controller Centralized management, Cloud Server remote configuration, east in installation.

For connection into the network the two Gigabit Ethernet interface on the E-LINK Rugged & Ultra Rugged can connect to a wired backbone.

EION E-LINK Rugged & Ultra Rugged can be configured as a standalone access point, or as part of a group of APs managed by EION's Network Controller. With up to eight different SSIDs per AP, E-LINK Rugged & Ultra Rugged AC products can form a powerful 3G/4G offload solution for service providers and

PRODUCT FEATURES

- Outdoor 2 x 2 MIMO 802.11ac/a/b/g/n Wi-Fi AP supports dual-band operation in 2.4 GHz & 5.8 GHz

- Dual band - 2.4 GHz + 5GHz

- 2 x 2 MIMO Technology, up to **1200 Mbps**

- 128 MAX Simultaneous Users (64 in 2.4 GHz + 64 in 5GHz)

- 360-degree coverage

- **Increased Receiver Sensitivity for better coverage**

- User Access Control (define radius of AP)

- Beamforming

- Central Controller Managed

- Zero-Touch Configuration from Controller

- IEEE 802.11ac compliant and Backward compatible with 802.11a/b/g/n

- Real Time Network Load Graphs

- Watchdog Timer

- User configured Timed Reboots

ORDERING INFORMATION

9180-00-20-10	E-Link Rugged 2 x 2 MIMO Outdoor Access Point; 4 x N-Type External
9180-00-20-20	E-Link Ultra Rugged 2 x 2 MIMO Outdoor Access Point; 4 x N-Type External

EION WIRELESS

RADIO SPECIFICATION

Topology	Standard Wireless LAN Topology (Multiple Modes Supported)
Frequency	2.4 GHz and 5 GHz (Dual-Band in a single enclosure)
Channel Size	20 MHz ; 40 MHz ; 80 MHz (5GHz Only)
Modulation	OFDM : BPSK, QPSK, 16-QAM 64-QAM and 256-QAM
Signaling Rate	900 Mbps on 5 GHz and 300 Mbps on 2.4 GHz
Integrated Antenna	5dBi @ 2.4GHz, 5dBi @ 5GHz
Output Power	5GHz Up to + 26 dBm (aggregated 29 dBm), 2.4 GHz Up to + 29 dBm (aggregated 32 dBm), configurable in 1dB step

Receiver Sensitivity (BER = 10^{-6}) +/- 2dB	**5 GHz**				**2.4 GHz**		
	Modulation	**20 MHz**	**40 MHz**	**80 MHz**	**Modulation**	**20 MHz**	**40 MHz**
	BPSK	-94 dBm	-91 dBm	-90 dBm	BPSK	-94 dBm	-93 dBm
	16-QAM	-82 dBm	-79 dBm	-76 dBm	16-QAM	-84 dBm	-82 dBm
	64-QAM	-70 dBm	-67 dBm	-64 dBm	64-QAM	-75 dBm	-72 dBm
	256-QAM	NA	-65 dBm	-61 dBm	256-QAM	NA	NA

Duplexing Format	Dynamic Time Division Duplex (TDD), Half-Duplex
Medium Access Control	IEEE 802.11ac/abgn
Data Rate Selection	Dynamic Adaptive Modulation per Link

NETWORK SPECIFICATIONS

Network Connection	Gigabit Ethernet ports ; Auto MDI-X RJ45 10/100/1000 Mbps Ethernet
Operational Mode	AP, Gateway, WISP, Repeater Working Mode
Traffic Management	Standard WMM ; User Cloud Authentication
MAC Filtering and Firewall	Filtering through Standard MAC address, Firewalls – Zones
VLAN	Data Tagging/Un-tagging, 802.1q transparency, VLAN Management; SSID to VLAN Mapping
NAT	1:N NAT configurable through CPE GUI
DHCP	DHCP Client , DHCP server for LAN devices when in NAT mode, PPPoE, L2TP
Ipv6	Ipv6 pass through in bridge mode
Routes	Add static Routes
Operation Mode	Standalone, Hotspot, E-Link Controller (Centralized Network Management & Configuration System)
Enhanced Control	- Hotspot and Guest Portal Support - Powerful Network Diagnostic Utilities - Real-time Network Load Graphs

SECURITY

Management Access	Username and Password Compatible with all modern web browsers and Windows 7+ OS
Encryption	WEP (64, 128, 154), WPA1 (TKIP), WPA2 (CCMP – AES 128, CBC-MAC for headers).

MANAGEMENT

Management Access	Over the Air & Wired over prioritized ports
Remote Configuration/ Monitoring	HTML Web-GUI, E-LINK Controller
Installation Management	Wireless Link Monitor and Diagnostic Tool; - Provides noise and RSSI signal levels as well as other statistical information - Real-time view of available over the air bandwidth - Real-Time Link Quality Metrics - Built-in Spectrum Analyzer
Backup Configuration	Save Radio Configuration to local PC
Software Upgrade	Over the Air or local, Web-based upgrade
Services	Auto Reboot, Ping Watchdog

PHYSICAL, ELECTRICAL & ENVIRONMENTAL

Power Consumption	Typ. < 30 Watts
Power Supply	100-240V, 50/60 Hz AC; UL/CSA approved 48 Volt POE system; DC power Jack (12V to 24V). The included power supply includes one standard 24V DC adaptor.
Temperature Range	Operating: -20º C to +55º C Storage: -40º C to +70º C
Relative Humidity	Operating: 0% to 100% (condensing); Storage: Max. 90% (non-condensing)
Mounting Bracket	Supports Wall-Mounted or Ceiling Mounted
Weight	Carton Box 5 Units – 7 Kg
Dimensions	Carton Box 5 Units – 650 x 475 x 305 mm
Lightning Protection	Integrated, Telcordia GR-1089 compliant (Meets IEC 61000-4-2/ 4-4)

STANDARDS COMPLIANCE

Materials Compliance	RoHS/WEEE
Certification	CE, FCC & IC modular approvals

BOX CONTENTS

Each Box Contains the following items	- E-LINK Rugged (or Ultra Rugged) Outdoor 2 x 2 MIMO Access Point 48V PoE Injector - LAN Cable - Wall Mount Accessory - Quick Start Guide